

# GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service United States Department of Agriculture

**FEBRUARY 20, 2003** 

TM GRAIN TRANSPORT COST INDICATORS	<u>Truck</u>	<u>Rail</u>	<u>Barge</u>	<u>Oo</u> Gulf	cean PNW
Indicator Value* for 02/20	114	107	92	123	135
Compared to Last Week	<b>1</b>	•	•	<b></b>	•

\*Indicator: Base Year 2000=100; Weekly Updates include Truck=Diesel; Rail=Nearby Secondary Rail Market; Barge=Spot Illinois River Basis; Ocean Vessel based on Routes to Japan

Feb. 20-21	USDA 79 <sup>th</sup> Annual Agricultural Outlook Forum	Arlington, VA	202-314-3451 (ph) agforum@oce.usda.gov
Feb. 27-Mar. 1	Commodity Classic Trade Show	Charlotte, NC	Beth Musgrove 314-275-9915 (ph) musgrove@ncga.com
Mar. 3-4	3 <sup>rd</sup> Annual Trans-Pacific Maritime Conference	Long Beach, CA	858-485-9978 (ph) 858-485-1623 (fax)
Mar. 10-12	American Farmland Trust National Conference	Pacific Grove, CA	Doris Mittasch 413-589-9330 (ph) dmittasch@farmland.org
Mar. 25-28	National Grain and Feed Association (NGFA) 107 <sup>th</sup> Annual Convention	Tucson, AZ	202-289-0873 (ph) 202-289-5388 (fax) ngfa@ngfa.org
Mar. 31-Apr. 1	European Outlook Conference 2003: Reform, Trade & Sustainability	London, England	+44(0) 1892 533813 (ph) +44(0) 1892 544895 (fax) www.agra-net.com
May 4-6	North American Rail Shippers Assoc. Annual Mtg.	Washington, DC	202-639-2100 (ph)
May 5-7	American Feed Association Expo 2003	Minneapolis, MN	703-524-0810 (ph) afia@afia.org
May 18-20	2003 World Congress, A New Age In Agriculture: Working Together to Create the Future and Disable the Barriers	St. Louis, MO	314-206-3208 (ph) 314-206-3222 (fax)
July 20-22	U.S. Grains Council, 43 <sup>rd</sup> Annual Board of Directors Meeting; 4 <sup>th</sup> International Grain Marketing Conference & Trade Show	Minneapolis, MN	202-789-0789 (ph) 202-898-0522 (fax) grains@grains.org.

Report is prepared by Deen Olowolayemo, Hooshang Fazel, and Johnny Hill, Agricultural Economists, Transportation & Marketing, Agricultural Marketing Service, USDA (202) 690-1304. Support provided by Upper Great Plains Transportation Institute, North Dakota State University. This report can be found on the Internet at www.ams.usda.gov/tmd/grain.htm. E-mail\_comments and questions to Surajudeen.Olowolayemo@usda.gov\_.

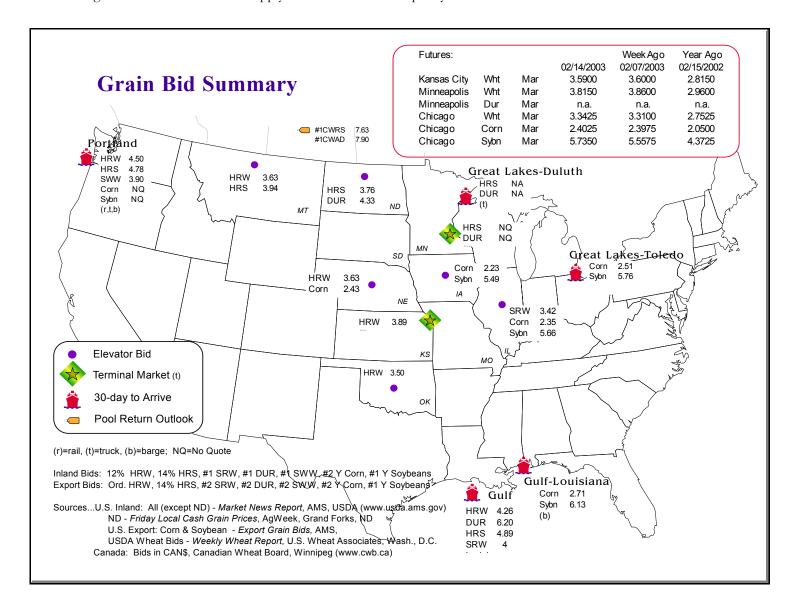
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Contents	
Rail	3
Barge	5
Truck	6
Grain Exports	7
Container	g

The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

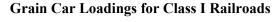
Market Update: U.S. Origins to Export Position Price Spreads (Per Bushel)					
Commodity	OriginDestination	This week	<u>Last week</u>		
Corn	IL Gulf	-0.36	-0.38		
Corn	NE Gulf	-0.28	-0.28		
Soybean	IA Gulf	-0.64	-0.65		
HRW	KS Gulf	-0.37	-0.40		
HRS	ND Portland	-1.02	-1.01		

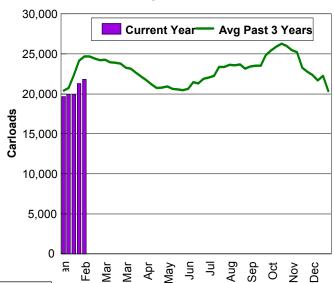
The **Grain Bid Summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.



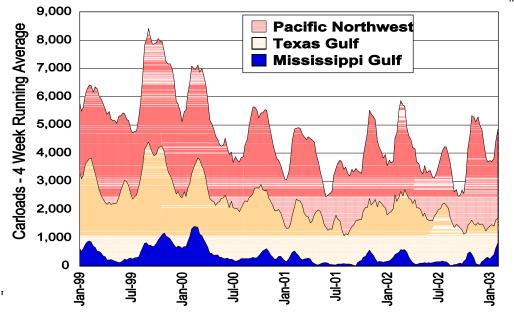
### **RAIL TRANSPORTATION**

Rail Deliverie	Rail Deliveries to Port (Carloads)						
	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total		
Week Ending:							
1/29/03	961	1,062	3,710	895	6,628		
02/05/03	993	1,121	4,278	623	7,015		
YTD 2003	4,455	6,168	19,135	4,338	34,096		
YTD 2002	2,189	11,009	12,727	5,491	31,416		
% YTD 2002	204%	56%	150%	79%	109%		
Total 2002	11,112	83,799	111,719	21,551	228,181		
Total 2001	10,022	81,804	111,376	26,604	229,806		
Source: Transport	tation & Marke	ting/AM	S/USDA; (*)	Incomplete Da	ta		





#### **Rail Deliveries to Port**



Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Class I Rail Carrier Grain Car Bulletin (Grain Carloads Originated and Grain Service Index)

	E	ast West		U.S. Total	Canada			
	CSXT	NS	BNSF	KCS	UP	U.S. 10tai	CN	CP
02/08/03	2,984	3,417	6,918	279	7,025	20,623	3,487	3,942
This Week Last Year	3,371	3,605	8,797	367	6,603	22,743	4,919	5,010
2003 YTD	18,061	19,870	45,658	2,640	40,592	126,821	20,752	19,520
2002 YTD	19,305	18,578	50,484	4,344	39,838	132,549	24,843	22,850
% of Last Year	94%	107%	90%	61%	102%	96%	84%	85%
2002 Total	142,760	164,745	400,179	27,161	344,296	1,079,141	191,835	195,765

<u>U.S. Rail Covered Hopper Cars Online Index</u>\* Jan-03 94.0 99.

94.0 99.5 93.0 89.7 94.0 94.5

Source: Association of American Railroads; \*Base Year =2001, Index based on Number of Covered Hopper Cars Online (available for Service).

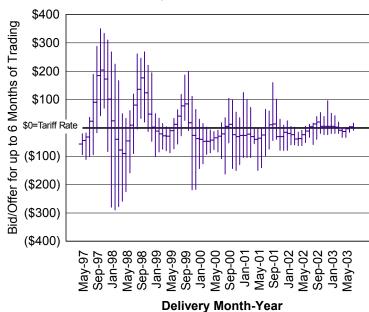
Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

Secondary Rail Car Market Average Premium/Discount to Tariff, \$/Car - Last Week							
	Delivery Period						
	Feb-03	Mar-03	Apr-03	May-03			
BNSF-GF	\$24	\$(16)	\$(24)	\$(24)			
UP-Pool	\$0	\$(9)	\$(14)	\$(14)			

Railroad Car 'Auction' Results Average Premium/Discount to Tariff, \$/Car - Last Auction					
Delivery for:	Mar-03	Apr-03	May-03		
COT/N. Grain	\$2	\$0	\$0		
COT/S. Grain	\$2	\$0	\$0		
GCAS/Region 1	no bid	no bid	no bid		
GCAS/Region 2	no bid	no bid	no bid		

Source: Transportation & Marketing/AMS/USDA.
COT=Certificate of Transportation; GCAS=Grain Car Allocation System

#### **Secondary Rail Market Bid**



**Tariff Rail Rates for Unit Train Shipments** 

January 2003

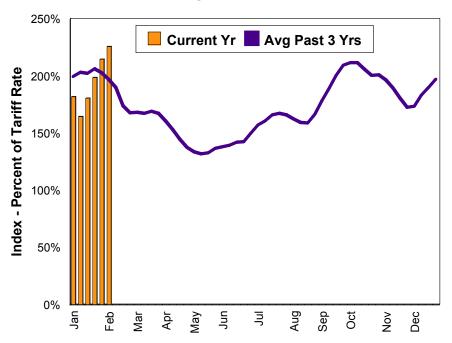
Date Effective	Tariff Item	Commodity	Origin	Destination	Rate Per Car	Rate Per MT	Rate/Per Bushel*
01/06/03	45560	Wheat	Minneapolis, MN	Houston, TX	\$2,050	\$22.60	\$0.62
01/06/03	43521	Wheat	Minneapolis, MN	Portland, OR	\$3,877	\$42.74	\$1.16
01/06/03	46540	Wheat	Kansas City, MO	Houston, TX	\$1,650	\$18.19	\$0.50
01/06/03	43586	Wheat	Kansas City, MO	Portland, OR	\$4,420	\$48.72	\$1.33
01/06/03	43581	Wheat	Omaha, NE	Portland, OR	\$4,005	\$44.15	\$1.20
01/06/03	31005	Corn	Minneapolis, MN	Portland, OR	\$3,050	\$33.62	\$0.85
01/06/03	31035	Corn	Kansas City, MO	Portland, OR	\$2,700	\$29.76	\$0.76
01/06/03	31005	Corn	Omaha, NE	Portland, OR	\$2,850	\$31.42	\$0.80
01/06/03	61110	Soybean	Minneapolis, MN	Portland, OR	\$3,030	\$33.40	\$0.91
01/06/03	61110	Soybean	Omaha, NE	Portland, OR	\$2,780	\$30.64	\$0.83

Source: www.bnsf.com

Approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

#### **BARGE TRANSPORTATION**

#### Illinois River Barge Rate Index - Rate Quotes



The Illinois River Barge Rate Index averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The Index, along with Rate Quotes and Futures Market bids are indicators of grain transport supply and demand.

Calculating **Barge Rate** Per Ton: Index × 1976 Tariff Benchmark Rate per Ton

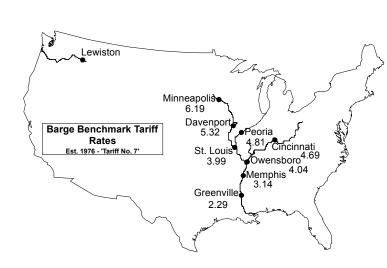
Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

BARGE RATE QUOTES: Southbound Barge Freight Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate						
	2/12/03	2/5/03	Mar. '03	May '03		
Twin Cities	nq	nq	200	188		
Mid-Mississippi	nq	nq	178	157		
Illinois River	178	205	163	149		
St. Louis	139	146	136	127		
Lower Ohio	134	141	135	129		
Cairo-Memphis	111	113	115	116		
Source: Transportation	on & Marketing	/AMS/USD	A			

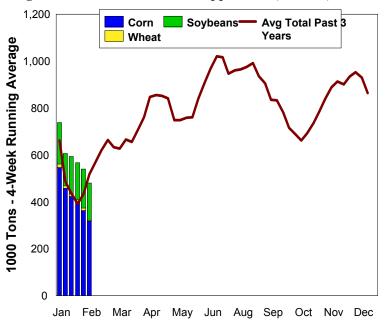
# BARGE FUTURES MARKET Southbound Barge Freight Nominal/Cash Basis Values Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

		Contract	Rate		
Week ended	River/Region	Period Period	Futures	Cash	
2/18/03	St. Louis	Mar	n/a	143	
		May	n/a	140	
		July	n/a	155	
		Sept	n/a	175	
		Oct	n/a	198	
	Illinois River	Mar	n/a	165	
		May	n/a	150	
		July	n/a	165	
		Sept	n/a	195	
		Oct	n/a	220	

Source: St. Louis Merchants Exchange



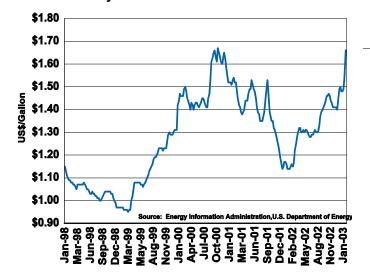
#### Barge Movements on the Mississippi River (Lock 27)



	Corn	Wht	<b>Sybn</b>	<u>Total</u>
Mississippi River				
Rock Island, IL (L15)	0	0	0	0
Winfield, MO (L25)	0	0	0	0
Alton, IL (L26)	191	2	90	292
Granite City, IL (L27)	263	5	121	400
Illinois River (L8)	155	0	72	236
Ohio River (L52)	51	14	137	225
Arkansas River (L1)	0	29	10	39
2003 YTD	2,642	196	1,641	4,649
2002 YTD	3,207	193	1,561	5,215
% of 2002 YTD	82%	102%	105%	89%
Total 2001	31,878	2,679	10,616	47,091

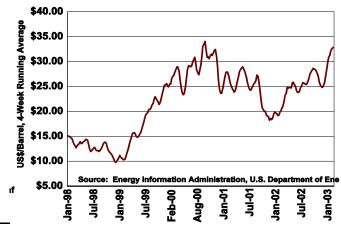
#### TRUCK TRANSPORTATION

## Weekly U.S. Retail Road Diesel Price



The weekly **Diesel Price** provides a proxy for trends in U.S truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

#### Weekly Brent Crude Price, Friday Close



Crude Oil Prices (02/18/03) US\$ per Barrel	This Week	<u>Last Week</u>	
Light Sweet Crude (NYMEX)	34.83	33.81	<b></b>
Brent Crude	33.23	32.50	<b></b>

Note: Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London.

Source: www.eia.doe.gov; \*U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import

# **GRAIN EXPORTS**

U.S. Export Balances (1,000 Metric Tons)

_			V	Vheat	Corn	Soybean	Total		
	HRW	SRW	HRS	SWW	DUR	All		•	
Unshipped Export Balances									
02/06/03	1,169	498	1,123	597	111	3,498	5,317	6,166	14,981
This Week Year Ago	1,284	794	917	583	186	3,764	8,339	5,909	18,012
Cumulative Exports-Crop Year									
02/03 YTD	5,177	2,150	4,742	2,491	557	15,116	17,851	17,518	50,485
01/02 YTD	5,904	3,900	3,905	2,290	838	16,838	18,297	17,713	52,848
01/02 Total	8,761	5,485	5,582	3,175	1,133	24,135	48,003	29,926	102,064
00/01 Total	9,314	4,445	5,775	5,156	1,130	25,819	47,734	27,567	101,120
99/00 Total	10,629	4,195	5,590	4,055	984	25,453	48,760	26,972	101,185

Source: Foreign Agricultural Service YTD-Year-to-Date (www.fas.usda.gov)

Crop Year: Wheat=5/31-6/01, Corn & Soybeans=9/01-8/31

Select U.S. Port Regions - Grain Inspections for Export (1,000 Metric Tons)												
	Pac	Pacific Region		Mississippi Gulf		Texas Gulf		Port Region Total		1		
	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Pacific	Mississippi	Texas
02/13/03	89	171	82	90	536	981	112	0	4	343	1,606	116
2003 YTD	721	727	757	678	3,379	4,843	554	6	11	2,205	8,900	571
2002 YTD	1,248	628	448	528	3,855	4,365	705	2	161	2,323	8,749	868
% of 2002 YTD	58%	116%	169%	128%	88%	111%	79%	330%	7%	95%	102%	66%
2002 Total	10,007	5,877	1,639	6,829	34,991	17,996	6,971	468	468	17,523	59,816	7,906
Source: Federal	Grain Ins	pection S	Service	YTD-Y	ear-to-Da	ate						

## **U.S. Grain Inspected for Export**



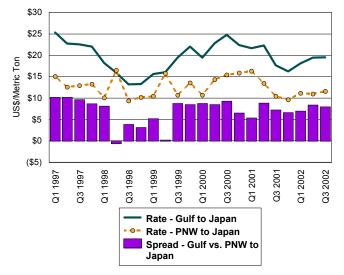
Select Canadian Port Export Inspections 1,000 Metric Tons, Week End Summary							
02/13/2003 Vancouver	Wheat	<u>Durum</u>	Barley 17				
Prince Rupert	54						
Prairie Direct	2		2				
Thunder Bay							
St. Lawrence	2,723	1,495	203				
2001/02 YTD	7,275	1,766	534				
2002/03 YTD	2,779	1,495	222				
% of Last Year	262%	118%	241%				
Source: Canadian	Grains Con	nmission. Cro	n Year 8/1-7/31				

Port Regio	n Ocean	Grain '	Vessels		
		Gulf		Pacific Northwest	Vancouver B.C.
	In Port	Loaded 7-Days	Due Next 10-Days	<u>In Port</u>	<u>In Port</u>
02/06/03	47	55	58	9	2
02/13/03	45	55	50	8	1
2002 Range	(1555)	(3366)	(4482)	(315)	(012)
2002 Avg	35	51	65	8	5
Source: Trans	sportation a	& Marketii	ng /AMS/ I	ISDA	

## Gulf Port Region Grain Vessel Loading Past 7 Days







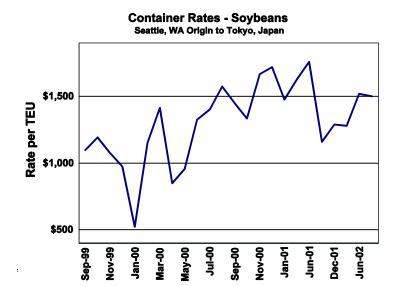
Quarterly Ocean Freight Rates Average Rates & Percentage Changes, U.S. Dollars/Metric Ton								
		2001 4 <sup>rd</sup> Qtr	% Change		2002 4 <sup>rd</sup> Qtr	2001 4 <sup>rd</sup> Qtr	% Change	
Gulf to				Pacific NW	to			
Japan	\$24.75	\$16.25	52%	Japan	\$15.39	\$9.64	60%	
Mexico	\$7.50	-	-					
N. Europe	\$18.07	\$11.73	54%	Argentina/E	Brazil to			
N. Africa	\$18.33	\$16.98	8%	Med. Sea	\$22.00	-	-	
Med. Sea		\$10.58	-	N. Europe	\$22.63	\$15.72	44%	

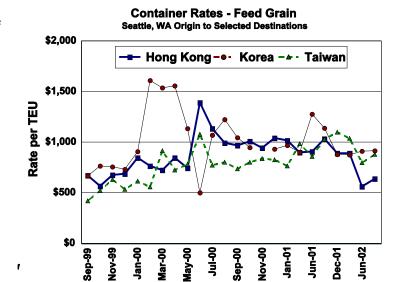
<b>Export Region</b>	Import Region	Grain	Month	Volume Loaded (Tons)	Freight Rate (\$Ton)
U.S. Gulf	Taiwan	Heavy Grain	Feb. 10/15	56,000	\$26.00
U.S. Gulf	Japan	Heavy Grain	Feb. 28/Mar.11	54,000	\$27.40
U.S. Gulf	Japan	Heavy Grain	Jan. 15/20	42,000	\$25.50
U.S. Gulf	Japan	Heavy Grain	Jan. 23/Feb. 7	54,000	\$27.25
PNW	Pakistan	Wheat	Jan. 15/25	30,000	\$41.98
U.S. Gulf	China	Heavy Grain	Feb. 11/28	55,000	\$25.00

## CONTAINER

#### **Container Ocean Freight Rates**

Average Rate per TEU, Weighed by Shipping Line Market Share Source: Transportation & Marketing/AMS/USDA, Quarterly Updates





Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.